

RESTRICTED CIRCULATION

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Agricultural Memorandum No.623
Estimated Return to Capacity Dates and Excess Winter Rain
1973-74

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Using the model explained in MAFF Tech. Bull. No 24, the following results were obtained:-

		<u>Return</u>	<u>Excess</u> <u>(in)</u>	<u>Average</u> <u>Excess</u>	<u>Percentage</u>
<u>Northern Region</u>					
Cumberland	Carlisle	D.1	9.3	14.4	65
	Newton Rigg	N.1	18.5	16.6	112
Durham	Tynemouth	D.3	4.4	8.2	54
	Houghall	D.1	6.3	9.3	68
Northumberland	Berwick	Jan 1	3.2	7.2	45
	Bellingham	Aug 3	13.95	16.1	87
	Cockle Park	D.1	6.4	10.8	59
Westmorland	Briery Close	Aug 2	39.4	52.0	76
North Riding	Ampleforth	S.2	10.1	11.4	89
	Leeming	S.3	9.5	10.2	93
<u>Yorks-Lancs. Region</u>					
Lancashire	Morecambe	O.2	15.4	18.2	85
	Bolton	Aug 3	30.6	25.4	120
	Blackpool	O.2	13.2	15.0	88
	Manchester	O.2	11.8	14.3	83
East Riding	Hull	D.1	3.9	7.7	51
	Lowthorpe	O.3	7.3	8.7	84
West Riding	Ilkley	S.2	17.5	17.3	101
	Wakefield	Jan 1	4.3	8.6	50
	Askham Bryan	O.2	6.6	7.7	86
<u>West Midlands</u>					
Cheshire	Delamere	S.3	14.5	13.1	111
Hereford	Ross	Jan 1	8.6	9.7	89
Shropshire	Shrewsbury	N.3	6.4	7.5	85
Stafford	Hanley	O.2	13.2	13.3	100
	Walsall	D.1	7.7	10.6	73
Warwick	Birmingham	N.3	9.4	12.3	77
	Leamington	Jan 3	2.4	7.1	34
Worcester	Redhill	Jan 1	5.9	7.7	77
<u>East Midlands</u>					
Derby	Belper	S.1	13.1	11.4	115
Leicester	Newtown Linford	D.1	6.2	9.5	65
Lincoln	Cranwell	Jan 1	2.6	5.3	49
	Cleethorpes	Feb 3	0.0	6.5	0
Northampton	Kettering	Feb 1	1.2	7.1	17
	Hazelborough	Jan 1	5.5	9.0	61
Nottingham	Finningley	D.3	3.0	5.2	58
	Mansfield	N.1	7.9	8.8	90
	Sutton Bonington	N.3	6.0	7.0	86
Rutland	Tixover	Jan 2	2.6	6.7	39

			<u>Return</u>	<u>Excess</u> (in)	<u>Average</u> <u>Excess</u>	<u>Percentage</u>
<u>East</u>						
Bedford	Sandy	Feb 1	1.7	5.2	33	
	Cambridge	D.3	3.1	5.5	56	
Essex	Cambridge	Feb 2	0.5	4.7	11	
	Rickstones	Jan 3	2.1	4.7	45	
Hertford	Saffron Walden	Jan 2	2.7	5.4	50	
	Rothamsted	Jan 1	7.1	8.4	85	
Huntingdon	Houghton	Jan 3	2.0	5.0	40	
Holland	Spalding	Jan 1	2.0	6.4	31	
Norfolk	Kings Lynn	D.2	4.0	5.5	73	
	Marham	D.3	1.5	6.7	22	
Suffolk	Burlingham	Jan 1	1.2	6.6	18	
	Lowestoft	Jan 2	2.0	5.9	34	
	Isleham	Feb 1	0.7	4.0	17	
	East Bergholt	Jan 1	3.1	5.8	53	
<u>South East</u>						
Berkshire	Reading	D.3	6.2	6.8	91	
	Wantage	D.1	8.6	10.1	85	
Buckingham	Newport Pagnell	Jan 1	4.3	6.4	67	
	Gt Missenden	D.3	8.9	10.9	82	
Hampshire	S. Farnborough	Jan 1	5.9	7.8	76	
	Southsea	Jan 1	6.5	9.3	70	
	Leckford	D.3	11.3	12.3	92	
	Bournemouth	D.2	11.5	11.7	99	
Kent	Ryde	Jan 1	7.9	11.0	72	
	Swanley	Jan 1	4.9	5.5	89	
	Margate	S.3	5.9	4.9	120	
	Wye	O.1	12.4	10.2	121	
Middlesex	E. Malling	Jan 2	4.6	8.2	56	
	Southgate	Jan 2	3.2	7.4	43	
Oxford	Chipping Norton	D.2	8.0	10.0	80	
	Oxford	Jan 1	4.6	8.0	57	
Surrey	Kew	Jan 2	2.9	5.5	53	
	Croydon	Jan 1	7.4	7.3	101	
Sussex	Bodiam	D.1	11.1	12.6	88	
	Chichester	D.2	7.6	11.4	67	
<u>South West</u>						
Cornwall	St Austell	S.3	29.0	26.4	110	
	St Mawgan	N.2	17.3	17.5	99	
Devon	Lizard	D.1	25.3	15.0	169	
	Chivenor	N.1	14.5	15.1	96	
	Plymouth	D.1	15.2	17.8	85	
	Exeter	N.1	17.2	11.3	117	
Dorset	Blandford	D.2	14.3	14.3	100	
Gloucester	Bristol	N.1	11.1	12.7	87	
	Cheltenham	Jan 1	6.9	8.5	81	
Somerset	Martock	D.1	14.1	9.9	142	
	Cannington	D.1	9.4	10.3	91	
Wiltshire	Lacock	D.2	7.0	10.4	67	
	Boscombe Down	Jan 1	8.5	10.7	79	

		<u>Return</u>	<u>Excess</u> (in)	<u>Average</u> <u>Excess</u>	<u>Percentage</u>
<u>Wales</u>					
Anglesey	Ll. Esgob	S.1	24.0	20.0	120
Brecon	Brecon	Aug 1	46.1	23.7	195
Caernarvon	Conway	Aug 1	39.6	11.3	350
Cardigan	Aberporth	Aug 2	24.9	20.7	120
Carmarthen	Carmarthen	S.2	23.8	30.8	77
Denbigh	Denbigh	O.1	18.4	13.3	138
	Wrexham	S.2	18.7	15.4	121
Flint	Hanmer	O.1	10.7	11.1	96
Glamorgan	Cardiff	S.1	13.6	21.9	62
Merioneth	Arthog	Aug 2	24.4	28.0	87
	Derwen	S.1	22.6	20.7	109
Monmouth	Usk	S.3	17.0	19.5	87
Montgomery	Welshpool	Aug 2	16.2	15.3	106
Pembroke	Pembroke	O.1	19.3	20.6	94
Radnor	New Radnor	O.1	18.4	22.3	82

Over the great majority of England 1973-74 was the third winter in succession with less than average excess rainfall. The only areas above average were the western Pennines, the majority of central and north Wales, SW Cornwall, E Devon, S Somerset and Dorset and E Kent (where heavy thunderstorms occurred in September). Less than 5 inches excess winter rain fell over all East Anglia, the East Midlands east of a line from Doncaster to Oxford, and the north east coastal strip from Hull to Berwick.

Any comments or suggestions on this paper should be referred to the author.

Meteorological Office
Bracknell

June 1974